

SEQUENCE LISTING

<110> Sheridan, Mark

Kittilson, Jeffrey

Moore, Craig

<120> Somatostatins and Methods

<130> 255.00040101

<140> US 09/727,739

<141> 2000-12-01

<150> US 60/168,934

<151> 1999-12-03

<160> 52

<170> PatentIn version 3.0

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<213> Homo sapiens

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Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala 1 5 10 15

Leu Ala Ile Ser Ser Val Ser Ala Ala Pro Ser Asp Ala Lys Leu Arg 20 25 30

Gln Leu Leu Gln Arg Ser Leu Met Ala Pro Ala Gly Lys Gln Glu Leu 35 40 45

Ala Arg Asn Thr Leu Val Glu Leu Leu Ser Glu Leu Ala His Val Glu 50 55 60

Asn Glu Ala Ile Glu Leu Asp Asp Met Ser His Gly Val Glu Gln Glu 65 70 75 80

Asp Val Asp Leu Glu Leu Glu Arg Ala Pro Gly Pro Val Leu Ala Pro 85 90 95

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Ser Cys

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<213> Oncorhynchus mykiss

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Gln Leu Leu Gln Arg Ser Leu Met Ala Pro Ala Gly Lys Gln Glu Leu 45

Ala Arg Asn Thr Leu Val Glu Leu Ser Glu Leu Ala His Val Glu 55

Asn Glu Ala Ile Glu Leu Asp Asp Met Ser His Gly Val Glu Gln Glu 65

Asp Val Asp Leu Glu Leu Glu Arg 85

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Ala Pro Gly Pro Val Leu Ala Pro Arg Glu Arg Lys 1 5 10

<210> 7

<211> 24

<212> PRT

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Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala 1 5 10 15

Leu Ala Ile Ser Ser Val Ser Ala

<210> 8

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<212> DNA

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gacgcgtgtc cagtgcgccc tagcactact ctccctagcc ctggccatca gcagcgtctc 180

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Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu 20 25 30

Arg Ser Arg Arg Leu Leu Gln Arg Ala Arg Ala Ala Leu Pro His
35 40 45

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro 50 55 60

Cys Leu Arg Pro Arg Lys Val Lys Cys Pro Ala Gly Ala Lys Glu Asp
65 70 75 80

Leu Arg Val Glu Leu Glu Arg Ser Val Gly Asn Pro Asn Asn Leu Pro 85 90 95

Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe 100 105 110 Thr Ser Cys 115

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<213> Oncorhynchus mykiss

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1 5 10 15

Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys
20 25

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<213> Oncorhynchus mykiss

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Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu 20 25 30

Arg Ser Arg Arg Leu Leu Gln Arg Ala Arg Ala Ala Leu Pro His 35 40 45

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro 50 55 60

Cys Leu Arg Pro Arg Lys Val Lys Cys Pro Ala Gly Ala Lys Glu Asp
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Leu Arg Val Glu Leu Glu Arg 85

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<210> 13

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Leu Ala Ile Cys Ser Gln Gly Ala Ala 20 25

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<213> Oncorhynchus mykiss

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aatccactgt gccctggccc tgctgggttt ggccctggcc atttgcagcc aaggagccgc 180

ctcgcagccc gacctggacc tccgcagccg cagactcctt cagagggctc gtgccgctgc 240

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cctgaggccc aggaaagtga agtgtcaagc gggggctaaa gaggacctgc gtgtggagct 360

ggagcgctca gtgggcaacc ccaacaacct tccccccgt gagcgcaaag ccggctgcaa 420

gaacttctac tggaagggct tcacttcctg ctgagggaag aataaaccga ccaccttatg 480

acatgacgct gccaatcacg tcacaccgcc aacttacacc tgacgaatgc agccaatcaa 540

cagttagctg tgcccgatga tggttcttga aatcaacaga atgatgtacc tgtctaattt 600

gtgaaataaa tataaaataa ttg 623

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<213> Oncorhynchus mykiss

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Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu 20 25 30

Ala Ser Arg Arg Leu Leu Gln Arg Ala Leu Ala Ala Leu Pro His
35 40 45

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro 50 55 60

Cys Leu Arg Trp Arg Pro Arg Lys Val Lys Gly Pro Gln Leu Lys Ala 65 70 75 80

Lys Glu Asp Leu Glu Arg Ser Val Asp Asn Leu Pro Pro Arg Glu Arg
85 90 95

Lys Ala Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys
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<210> 16

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<213> Oncorhynchus mykiss

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Phe Tyr Trp Lys Gly Phe Thr Ser Cys 20

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<213> Oncorhynchus mykiss

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1 5 10 15

Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu 20 25 30

Ala Ser Arg Arg Leu Leu Gln Arg Ala Leu Ala Ala Leu Pro His

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro 50 55 60

Cys Leu Arg Trp Arg Pro Arg Lys Val Lys Gly Pro Gln Leu Lys Ala
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70
80

Lys Glu Asp Leu Glu Arg

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<213> Oncorhynchus mykiss

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<210> 19

<211> 25

<212> PRT

<213> Oncorhynchus mykiss

<400> 19

Met Arg Val Ser Gln Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala 1 5 10 15

Leu Ala Ile Cys Ser Gln Gly Ala Ala 20 25

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actgtgcact ggccctgctg ggtctggccc tggcaatttg cagccaagga gccgcctcgc 180

agccagacct ggacctcgcg agccgccgac tcctccagag ggccctggcc gctgcattgc 240

cacacaggag tggagtaagc gagcgatgga ggacattcta tccgaactgt ccttgcctga 300

ggtggaggcc cagaaaagtg aagggtccac agctgaaggc caaagaggac ctggagcgct 360

cagtggacaa ccttcccccc cgcgagcgca aagctggctg caagaacttc tactggaagg

gattcacttc ttgctaaggg aagaaaagcc tgaccacctt atgacacaat gcattcaatc 480

acatcacacc gccaaccttc atctgactaa tgtagccaat cagcaattag ctgtgcctga 540

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<213> Homo sapiens

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1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys 20 25

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<211> 37

<212> DNA

<213> Artificial

<220>

<223> Primer

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<210> 23

<211> 32

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 23

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<210> 24

<211> 48

<212> DNA

<213> Artificial

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<211> 20

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<213> Myxine glutinosa

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1 5 10 15

Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr 20 25 30

Ser

<210> -28

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<213> Hydrolagus collei

<400> 28

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<210> 29

<211> 26

<212> PRT

<213> Amia calva

<400> 29

Ser Ala Asn Pro Ala Leu Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys
1 5 10 15

Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
20 25

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<213> Acipenser gueldenstaedti

<400> 30

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<223> Primer

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<210> 34

<211> 21

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 34 gttggcggtg tgacgtgatt g 21

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<212> DNA

<213> Skipped sequence

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<211> 105

<212> PRT

<213> Ictalrus punctatus

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Ser Ala Val Gly Val Ile Ser Cys Gly Arg Pro His Val Val Leu Asn 20 25 30

Ser Ala Leu Glu Glu Ala Arg Asn Val Pro Phe Gly Glu Glu Val Pro 35 40 45

Glu Arg Leu Thr Leu Pro Glu Leu Gln Trp Met Leu Ser Asn Asn Glu 50 55 60

Leu Thr Pro Val Gln Val Glu Glu Ala Pro Arg Ser Arg Leu Glu Leu 65 70 75 80

Val Arg Arg Asp Asn Thr Val Thr Ser Lys Pro Leu Asn Cys Met Asn 85 90 95

Tyr Phe Trp Lys Ser Arg Thr Ala Cys

<210> 37

<211> 125

<212> PRT

<213> Lophius americanus

<400> 37

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Leu	Cys	Gly	Pro 20	Ser	Val	Ser	Ser	Gln 25	Leu	Asp	Arg	Glu	Gln 30	Ser	Asp
Asn	Gln	Asp 35	Leu	Asp	Leu	Glu	Leu 40	Arg	Gln	His	Trp	Leu 45	Leu	Glu	Arg
Ala	Arg 50	Ser	Ala	Gly	Leu	Leu 55	Ser	Gln	Glu	Trp	Ser 60	Lys	Arg	Ala	Val
Glu 65	Glu	Leu	Leu	Ala	Gln 70	Met	Ser	Leu	Pro	Glu 75	Ala	Thr	Phe	Gln	Arg 80
Glu	Ala	Glu	Asp	Ala 85	Ser	Met	Ala	Thr	Glu 90	Gly	Arg	Met	Asn	Leu 95	Glu
Arg	Ser	Val	Asp	Ser	Thr	Asn	Asn	Leu 105	Pro	Pro	Arg	Glu	Arg 110	Lys	Ala
Gly	Cys	Lys 115	Asn	Phe	Tyr	Trp	Lys 120	Gly	Phe	Thr	Ser	Cys 125			
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<21	1>	120		•											
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<213	3> (Caras	sius	aura	atus										
<400	0> :	38													
Met 1	Arg	Leu	Cys	Glu 5	Leu	His	Cys	Tyr	Leu 10	Ala	Leu	Leu	Gly	Leu 15	Ser
Leu	Val	Leu	Cys 20	Gly	Arg	Cys	Ala	Asn 25	Ser	Gln	Leu	Glu	Pro 30	Asp	Leu
Asp	Phe	Arg 35	His	His	Arg	Leu	Leu 40	Gln	Arg	Ala	Ser	Ala 45	Thr	Gly	Gln

Ala Thr Gln Asp Phe Thr Lys Arg Asp Val Glu Lys Leu Leu Ser Leu 50 55 60

Leu Ser Ile Pro Glu Met Glu Met Arg Glu Lys Gly Leu Ser Met Ala 65 70 75 80

Gly Glu Ser Glu Asp Leu Arg Leu Glu Gln Glu Arg Ser Ala Glu Ser 85 90 95

Ser Asn Gln Leu Pro Thr Arg Val Arg Lys Glu Gly Cys Lys Asn Phe 100 105 110

Tyr Trp Lys Gly Phe Thr Ser Cys 115 120

<210> 39

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<212> PRT

<213> Carasius auratus

<400> 39

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Val Arg Ala Ala Val Leu Pro Val Glu Glu Arg Asn Pro Ala Gln
20 25 30

Ser Arg Glu Leu Ser Lys Glu Arg Lys Glu Leu Ile Leu Lys Leu Ile 35 40 45

Ser Gly Leu Leu Asp Gly Val Asp Asn Ser Val Leu Asp Gly Glu Ile 50 55 60

Ala Pro Val Pro Phe Asp Ala Glu Glu Pro Leu Glu Ser Arg Leu Glu 65 70 75 80

Glu Arg Ala Val Tyr Asn Arg Leu Ser Gln Leu Pro Gln Arg Asp Arg
85 90 95

Lys Ala Pro	Cys Lys	Asn Phe		Crp Lys	Thr Phe	Thr	Ser C	ys			
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<213> Rana	ridibun	ıda									
·			• •								
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Ala Arg Ala	Leu Ser 20	Gln Pro		Asp Asn 25	Arg Ile	Thr	Thr G	Sly Arg			
Asn Gln Asp 35	Leu Asn	Ala Ile	Gln 6	Sln Asp	Leu Leu	Leu 45	Lys I	Leu Leu			
Ser Gly Trp 50	Thr Asp	Ser Arc	g Glu S	Ser Asn	Leu Val	Glu	Val (Glu Arg			
Asn Val Pro	Asp Pro	Pro Glu	ı Pro I	Lys Ile	Pro Pro 75	Ser	Val I	Lys Phe			
Pro Arg Leu	Ser Leu 85	ı Arg Glu	ı Arg I	Lys Ala 90	Pro Cys	Lys		Phe Phe			
Trp Lys Thr	Phe Thr	Met Cys	3								
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<213> Ictalurus punctatus											

Met Pro Ser Thr Arg Ile Gln Cys Ala Leu Ala Leu Leu Ala Val Ala 1 5 10 15

Leu Ser Val Cys Ser Val Ser Gly Ala Pro Ser Asp Ala Lys Leu Arg 20 25 30

Gln Phe Leu Gln Arg Ser Ile Leu Ala Pro Ser Val Lys Gln Glu Leu 35 40 45

Thr Arg Tyr Thr Leu Ala Glu Leu Leu Ala Glu Leu Ala Glu Ala Glu 50 55 60

Asn Glu Val Leu Asp Ser Asp Glu Val Ser Arg Ala Ala Glu Ser Glu 65 70 75 80

Gly Ala Arg Leu Glu Met Glu Arg Ala Ala Gly Pro Met Leu Ala Pro 85 90 95

Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr
100 105 110

Ser Cys

<210> 42

<211> 121

<212> PRT

<213> Lophius americanus

<400> 42

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Leu Ser Leu Thr Ala Ser Ile Ser Cys Ser Phe Ala Gly Gln Arg Asp 20 25 30

Ser Lys Leu Arg Leu Leu His Arg Tyr Pro Leu Gln Gly Ser Lys 35 Gln Asp Met Thr Arg Ser Ala Leu Ala Glu Leu Leu Ser Asp Leu Leu Gln Gly Glu Asn Glu Ala Leu Glu Glu Glu Asn Phe Pro Leu Ala 70 Glu Gly Gly Pro Glu Asp Ala His Ala Asp Leu Glu Arg Ala Ala Ser Gly Gly Pro Leu Leu Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn 105 Phe Phe Trp Lys Thr Phe Thr Ser Cys 115 120 <210> 43 <211> 114 <212> PRT <213> Carasius auratus <400> 43 Met Leu Ser Thr Arg Ile Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala 10 Leu Ala Val Cys Ser Val Ser Ala Ala Pro Thr Asp Ala Lys Leu Arg 20 25 30 Gln Leu Leu Gln Arg Ser Leu Leu Asn Pro Ala Gly Lys Gln Glu Leu 35 40 Ala Arg Tyr Thr Leu Ala Asp Leu Leu Ser Glu Leu Val Gln Ala Glu • 50 55 60 Asn Glu Ala Leu Glu Pro Glu Asp Leu Ser Arg Ala Val Glu Lys Asp 70 65∵

Glu Val Arg Leu Glu Leu Glu Arg Ala Ala Gly Pro Met Leu Ala Pro 85 90 95

Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr 100 105 110

Ser Cys

<210> 44

<211> .115

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<213> Rana ridibunda

<400> 44

Met Gln Ser Cys Arg Val Gln Cys Ala Leu Thr Leu Leu Ser Leu Ala 1 5 10 15

Leu Ala Ile Asn Ser Ile Ser Ala Ala Pro Thr Asp Pro Arg Leu Arg 20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ser Ala Gly Lys Gln Glu Leu Ala 35 40 45

Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Ser Gln Thr Asp Asn 50 55 60

Glu Ala Leu Glu Ser Asp Asp Leu Pro Arg Gly Ala Glu Gln Asp Glu 65 70 75 80

Val Arg Leu Glu Leu Glu Arg Ser Ala Asn Ser Ser Pro Ala Leu Ala 85 90 95

Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe 100 105 110

Thr Ser Cys

<210> 45

<211> 116

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<213> Gallus gallus

<400> 45

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Leu Ala Val Gly Thr Val Ser Ala Ala Pro Ser Asp Pro Arg Leu Arg 20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Ala Gly Lys Gln Glu Leu 35 40 45

Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Ser Gln Thr Glu 50 55 60

Asn Glu Ala Leu Glu Ser Glu Asp Leu Ser Arg Gly Ala Glu Gln Asp 65 70 75 80

Glu Val Arg Leu Glu Leu Glu Arg Ser Ala Asn Ser Asn Pro Ala Leu 85 90 95

Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr 100 105 110

Phe Thr Ser Cys 115

<210> 46

<211> 116

<212> PRT

<213> Rattus norvegicus

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Cys Ile Val 1 5 10 15

Leu Ala Leu Gly Gly Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg 20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Thr Gly Lys Gln Glu Leu 35 40 45

Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu 50 55 60

Asn Asp Ala Leu Glu Pro Glu Asp Leu Pro Gln Ala Ala Glu Gln Asp 65 70 75 80

Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met 85 90 95

Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr 100 105 110

Phe Thr Ser Cys 115

<210> 47

<211> 116

<212> PRT

<213> Bos taurus

<400> 47

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Ser Ile Val 1 5 10 15

Leu Ala Leu Gly Gly Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg 20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Gly Lys Gln Glu Leu - 35 Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu 50 55 Ile Asp Ala Leu Glu Pro Glu Asp Leu Ser Gln Ala Ala Glu Gln Asp 70 75 Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met 85 90 . Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr 105 Phe Thr Ser Cys 115 <210> 48 <211> 116 <212> PRT <213> Macaca fascicularis <400> 48 Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Leu Ser Ile Val 10 Leu Ala Leu Gly Cys Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg 20 Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Gly Lys Gln Glu Leu 40 Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu Asn Asp Ala Leu Glu Pro Glu Asp Leu Ser Gln Ala Ala Glu Gln Asp

75

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